

CS56-36
Flooring; Oak

U. S. DEPARTMENT OF COMMERCE

DANIEL C. ROPER, Secretary

NATIONAL BUREAU OF STANDARDS

LYMAN J. BRIGGS, Director

OAK FLOORING

COMMERCIAL STANDARD CS56-36

Effective Date for New Production March 15, 1936



A RECORDED STANDARD OF THE INDUSTRY

UNITED STATES
GOVERNMENT PRINTING OFFICE
WASHINGTON : 1936

PROMULGATION
of
COMMERCIAL STANDARD CS56-36
for
OAK FLOORING

On December 12, 1935 the National Oak Flooring Manufacturers' Association requested that its grading rules be submitted to manufacturers, distributors, and users for approval of all concerned as a commercial standard for white- and red-oak flooring. The industry has since accepted and approved for promulgation by the United States Department of Commerce, through the National Bureau of Standards, the grade specifications as shown herein.

This commercial standard is effective for new production from March 15, 1936.

Promulgation recommended.

I. J. Fairchild,
Chief, Division of Trade Standards.

Promulgated.

Lyman J. Briggs,
Director, National Bureau of Standards.

Promulgation approved.

Daniel C. Roper,
Secretary of Commerce.

OAK FLOORING

COMMERCIAL STANDARD CS56-36

PURPOSE

1. This standard for white-oak and red-oak flooring is a basis for common understanding between manufacturers, distributors, and users of this product. By its general acceptance, use, and certification by labels it is hoped to increase interest in the manufacture, sale, and use of oak flooring manufactured to standard grades, to the mutual advantage of all concerned.

2. The service and satisfaction afforded by oak flooring, and consequently, the success of the industry, depend on the use of universally recognized grades, and, therefore, the following commercial standard is provided for guidance in the manufacture, sale, and use of this product.

SCOPE

3. This standard provides minimum specifications for commercial grades of white-oak and red-oak flooring. It covers length, width, thickness, defects, bundling, and the grading tolerances for these requirements.

GENERAL REQUIREMENTS

4. All commercial standard oak flooring, except square-edge strips, shall be tongued, grooved, and end-matched in accordance with the standard dimensions shown in figures 1, 2, and 3. It shall be well manufactured and shall comply with the specifications herein contained.

DETAIL REQUIREMENTS

QUARTER-SAWED GRADES

5. *Clear.*—The face shall be practically free of defects, except that $\frac{3}{8}$ inch of bright sapwood will not be considered as a defect. Color shall not be considered.¹ Bundles shall be 2 feet and up, not to exceed 20 percent under 4 feet. Average length 5 feet.

6. *Sap clear.*—The face shall be practically free of defects, but unlimited bright sapwood will not be considered as a defect. Color shall not be considered.² Bundles shall be 2 feet and up, not to exceed 20 percent under 4 feet. Average length 5 feet.

7. *Select.*—The face may contain sapwood, and will admit pinworm holes, streaks, slight imperfections in working, or small tight knots, when not in excess of one to every 3 feet in length. Bundles shall be 2 feet and up. Average length 4 feet.

¹ This applies to standard grades. Flooring separated for color can be obtained as a special by adding color requirements to above specifications.

² See footnote 1.

PLAIN SAWED GRADES

8. *Clear*.—The face shall be practically free of defects, except that $\frac{3}{8}$ inch of bright sapwood will not be considered as a defect. Color shall not be considered.³ Bundles shall be 2 feet and up, not to exceed 20 percent under 4 feet. Average length 5 feet.

9. *Select*.—The face may contain sapwood and will admit pinworm holes, streaks, slight imperfections in working or small tight knots, when not in excess of one to every 3 feet in length. Bundles shall be 2 feet and up. Average length 4 feet.

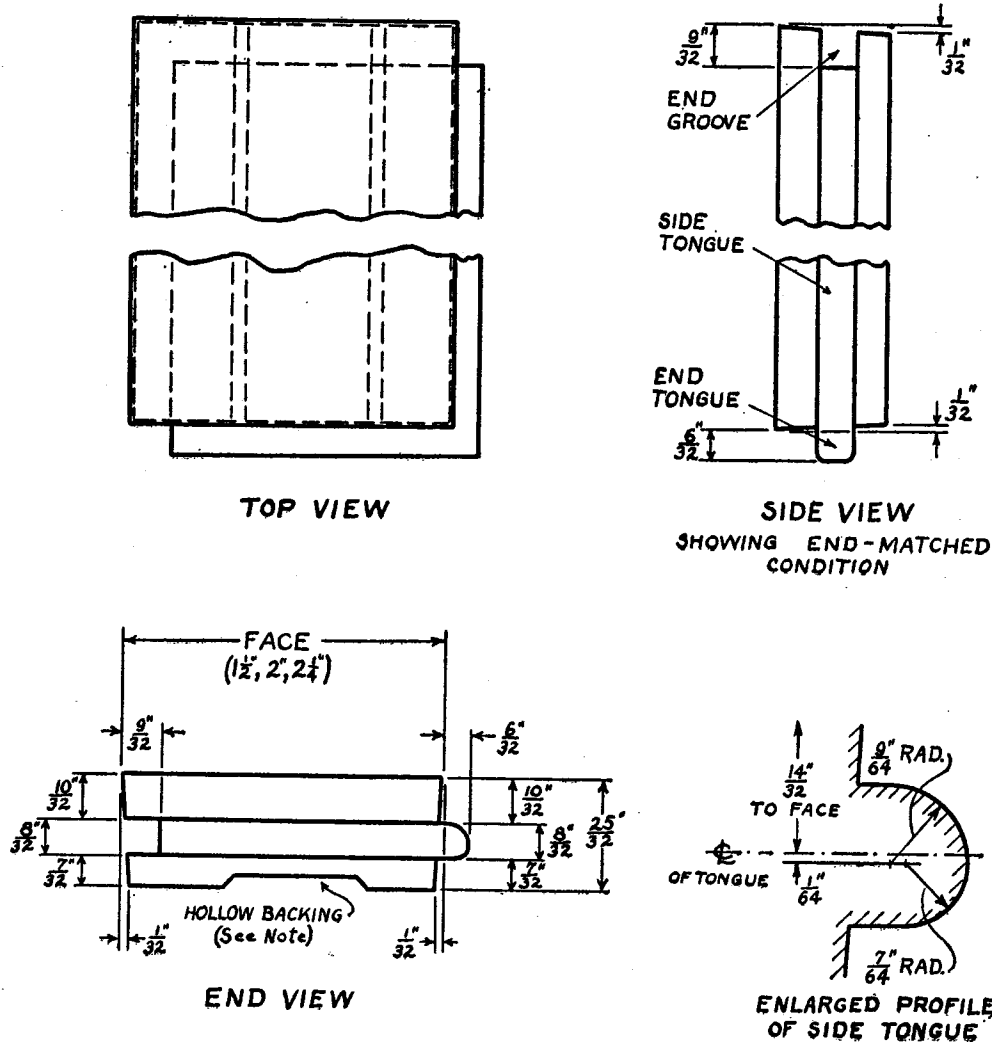


FIGURE 1.—Dimensions for $1\frac{1}{8}$ -inch oak flooring.

Hollow backing. $1\frac{3}{16}$ -inch flooring with $1\frac{1}{2}$ -, 2-, and $2\frac{1}{4}$ -inch faces shall have groove on back $\frac{3}{32}$ inch deep; $\frac{5}{16}$, $\frac{3}{4}$, and 1 inch wide, respectively; with sides beveled $\frac{1}{16}$ inch.

10. *No. 1 Common*.—Shall be of such nature as to enable the laying of a sound floor without cutting. Bundles shall be 2 feet and up. Average length 3 feet.

11. *No. 2 Common*.—May contain defects of any character, but shall be of such nature as to enable the laying of a serviceable floor. Bundles shall be $1\frac{1}{4}$ feet and up. Average length $2\frac{1}{2}$ feet.

³ See footnote 1.

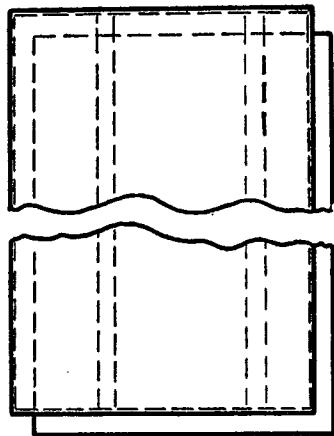
SQUARE-EDGE STRIP

12. Grades to be same as shown for quarter-sawn and plain-sawn grades, but bundling and lengths shall be as follows:

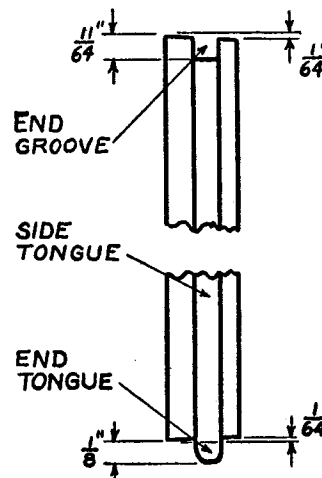
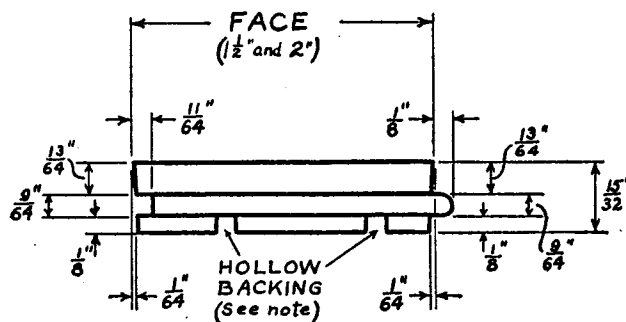
Clear.—Bundles shall be 3 feet and up. Average length 6 feet.

Select.—Bundles shall be 3 feet and up. Average length 5 feet.

No. 1 Common.—Bundles shall be 2 feet and up. Average length 4 feet.



TOP VIEW

SIDE VIEW
SHOWING END-MATCHED
CONDITION

END VIEW

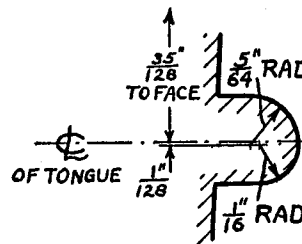
ENLARGED PROFILE
OF SIDE TONGUE

FIGURE 2.—Dimensions for 1/2-inch oak flooring.

Hollow backing. 1/2-inch flooring with 1 1/2- and 2-inch faces shall have two square grooves on back, each 1/4 inch deep, 1/4 inch wide, and spaced 1 inch center to center.

STANDARD THICKNESSES AND WIDTHS

13. *Tongued, grooved, and end-matched.*

Nominal thickness (inch)	Face (inches)
1 3/16	1 1/2; 2; 2 1/4; 3 1/4.
3/8	1 1/2; 2.
1/2	1 1/2; 2.

14. Square edge.

Thickness (inch)	Face (inches)
$\frac{5}{16}$ -----	$1\frac{1}{4}$; $1\frac{1}{8}$; $1\frac{1}{2}$; 2.
$\frac{3}{16}$ -----	$\frac{7}{8}$; 1; $1\frac{1}{8}$.

Also made rough back $1\frac{1}{2}$ inch thickness; $1\frac{1}{2}$ inch and 2-inch face.
All faces shown above in $\frac{5}{16}$ -inch square-edge flooring are finished $\frac{1}{64}$ inch over face.

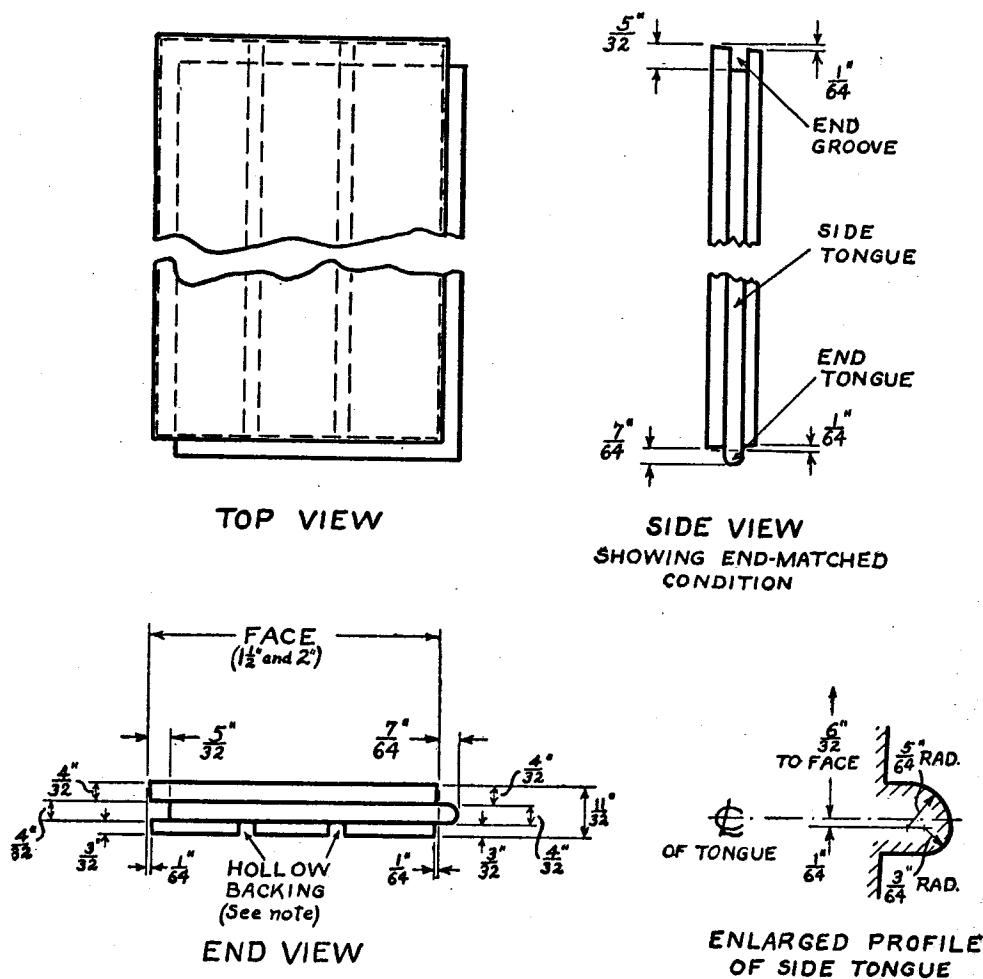


FIGURE 3.—Dimensions for $\frac{5}{8}$ -inch oak flooring.

Hollow backing. $\frac{3}{8}$ -inch flooring with $1\frac{1}{4}$ - and 2-inch faces shall have two square grooves on back, each $\frac{3}{32}$ inch deep, $\frac{3}{32}$ inch wide, and spaced $1\frac{1}{32}$ inch center to center.

LENGTH

15. An allowance of $\frac{1}{4}$ inch shall be added to the tongue on the end-matching when measuring the length of each piece of oak flooring.

BUNDLING

16. Oak flooring is bundled by averaging the lengths. A bundle may include pieces from 6 inches under to 6 inches over the nominal length of the bundle. No piece shorter than 9 inches shall be admitted.

17. The percentages under 4 feet referred to in grade rules apply on total footage of a single grade in any one shipment.

INSPECTION

18. Utmost care is exercised in the manufacture and inspection of oak flooring, and although the most capable grading experts are employed to assure constant uniformity of standard grades, it must be remembered that they are dealing with a product of nature in which there will occasionally appear marginal pieces on which the judgment of two equally competent inspectors might differ.

19. The purchaser may refuse any shipment in which the total footage of subgrade pieces is in excess of 5 percent of the grade in question, as determined by official reinspection.

REINSPECTION

20. If the reinspection results in a difference in favor of the purchaser of more than 5 percent, in feet (board measure), as shown on the invoice, then the shipper shall pay all the expenses of reinspection. If on the other hand, the difference is only 5 percent or less, in feet (board measure), the purchaser shall pay all the expenses of reinspection.

21. The quality and condition of oak flooring as it leaves the manufacturer is held to govern the reinspection.

CERTIFICATION

22. In order to assure the purchaser that he is getting oak flooring of the grade specified, the National Oak Flooring Manufacturers' Association has adopted the label indicated below, by which the manufacturer and the association, individually and jointly, certify full compliance with the commercial standard. The association proposes to control the use of the label through its centralized inspection service. It illustrates the manner in which manufacturers and trade associations may certify to the user compliance with commercial standards.



MANUFACTURERS' RECOMMENDATIONS

23. The following information is not part of the commercial standard for oak flooring, but represents the custom of the trade and the manufacturers' recommendations, based on long experience for maximum service from the use of oak flooring.

TABLE 1.—Standard counts and weights of oak flooring

Nominal	Actual	Counted	Weights 1,000 fbm
<i>Inches</i>	<i>Inches</i>	<i>Inches</i>	<i>Pounds</i>
1 $\frac{3}{16}$ by 3 $\frac{1}{4}$	2 $\frac{5}{32}$ by 3 $\frac{1}{4}$	1 by 4.....	2,250
1 $\frac{3}{16}$ by 2 $\frac{1}{4}$	2 $\frac{5}{32}$ by 2 $\frac{1}{4}$	1 by 3.....	2,000
1 $\frac{3}{16}$ by 2.....	2 $\frac{5}{32}$ by 2.....	1 by 2 $\frac{3}{4}$	2,000
1 $\frac{3}{16}$ by 1 $\frac{1}{2}$	2 $\frac{5}{32}$ by 1 $\frac{1}{2}$	1 by 2 $\frac{1}{4}$	2,000
3 $\frac{1}{8}$ by 2.....	1 $\frac{1}{2}$ by 2.....	1 by 2 $\frac{1}{2}$	1,000
3 $\frac{1}{8}$ by 1 $\frac{1}{2}$	1 $\frac{1}{2}$ by 1 $\frac{1}{2}$	1 by 2.....	1,000
1 $\frac{1}{2}$ by 2.....	1 $\frac{1}{2}$ by 2.....	1 by 2 $\frac{1}{4}$	1,200
1 $\frac{1}{2}$ by 1 $\frac{1}{2}$	1 $\frac{1}{2}$ by 1 $\frac{1}{2}$	1 by 2.....	1,200
5 $\frac{1}{16}$ by 2.....	5 $\frac{1}{16}$ by 2.....	Face count.....	1,200
5 $\frac{1}{16}$ by 1 $\frac{1}{2}$	5 $\frac{1}{16}$ by 1 $\frac{1}{2}$	Face count.....	1,200

DETERMINATION OF QUANTITY

24. Ascertain the square footage of the area to be covered and add thereto the following percentages:

50 % for.....	1 $\frac{3}{16}$ by 1 $\frac{1}{2}$ in.
37 $\frac{1}{2}$ % for.....	1 $\frac{3}{16}$ by 2 in.
33 $\frac{1}{8}$ % for.....	1 $\frac{3}{16}$ by 2 $\frac{1}{4}$ in.
33 $\frac{1}{8}$ % for.....	3 $\frac{1}{8}$ by 1 $\frac{1}{2}$ in.
25 % for.....	3 $\frac{1}{8}$ by 2 in.
33 $\frac{1}{8}$ % for.....	1 $\frac{1}{2}$ by 1 $\frac{1}{2}$ in.
25 % for.....	1 $\frac{1}{2}$ by 2 in.

The above figures are based on rectangular areas. Where there are bay windows or other projections, allowance should be made for additional flooring. It is always well to order 5 percent additional flooring to take care of floor layers' cutting and possible damage, if carelessly handled.

TABLE 2.—Method of determining board-foot contents of a bundle of oak flooring

Number of pieces per bundle	Nominal sizes	Multiply the length of bundle by—	Number of pieces per bundle	Nominal sizes	Multiply the length of bundle by—
	<i>Inches</i>			<i>Inches</i>	
12.....	1 $\frac{3}{16}$ by 1 $\frac{1}{2}$	2 $\frac{1}{4}$	18.....	1 $\frac{1}{2}$ by 2.....	3 $\frac{3}{4}$
12.....	1 $\frac{3}{16}$ by 2.....	2 $\frac{3}{4}$	24.....	3 $\frac{1}{8}$ by 1 $\frac{1}{2}$	4
12.....	1 $\frac{3}{16}$ by 2 $\frac{1}{4}$	3	24.....	3 $\frac{1}{8}$ by 2.....	5
12.....	1 $\frac{3}{16}$ by 3 $\frac{1}{4}$	4	30.....	5 $\frac{1}{16}$ by 1 $\frac{1}{2}$	3 $\frac{3}{4}$
18.....	1 $\frac{1}{2}$ by 1 $\frac{1}{2}$	3	30.....	5 $\frac{1}{16}$ by 2.....	5

ESSENTIALS OF GOOD OAK-FLOOR CONSTRUCTION

25. It is vitally important that precautions be taken preliminary to laying of oak flooring, to insure beautiful, enduring hardwood floors.

26. Defer delivery of the oak flooring until all plastering, cement, masonry work, painting, wallpapering, and interior finishing are completed and all are thoroughly dry. Under no circumstances should the laying begin until such work is completed and the interior atmosphere is dry.

TEMPORARY HEAT

27. In winter weather, the building should have heat turned on before flooring is laid, to remove dampness existing in the cold atmosphere. In summer months, in certain parts of the country where there is excessive moisture, buildings of importance usually have some heat turned on before, during, and after the laying of the oak flooring, in order to remove excess moisture from the interior atmosphere. In such conditions it is best to have the bundles delivered inside the building about a week before starting to lay the flooring.

FLOOR JOISTS

28. Floor joists should be of thoroughly air- or kiln-dried lumber and spaced not more than 16 inches, center to center, for subfloor construction.

OAK FLOORING LAID ON OPEN JOISTS

29. When there is no subfloor, the oak flooring of $1\frac{3}{16}$ -inch thickness is to be laid directly on the floor joists, spaced 12 inches center to center. Joists should be cross-bridged for added rigidity.

SUBFLOOR CONSTRUCTION

UNDER FLOORS

30. A subfloor is the foundation of the finished floor.

31. In new buildings it is presumed there will be an "underfloor" or "subfloor", laid over the joists. A subfloor must be provided in all cases where the oak flooring is less than $1\frac{3}{16}$ -inch thickness. It is a permanent advantage to have oak floors laid over a subfloor.

32. Subflooring should be 1- by 4-inch or 1- by 6-inch stock, sized, No. 1 Common or No. 2 Common grade, of good, new, kiln-dried lumber, laid diagonally (at 45 degrees) to the joists. The boards should be driven close, but not tight.

33. The subfloor boards should be square edged, and not tongued and grooved or shiplap, not wider than 6 inches, and should be clean and straight. Avoid boards that have been used as forms for concrete work.

NAILING THE SUBFLOORS

34. Boards must be nailed down solid at every bearing with two 10-penny nails. All butt joints must rest on bearings. If it is absolutely necessary to use subfloor boards wider than 6 inches, extra nailing must be employed.

35. One of the secrets of obtaining a solid, nonsqueaking, almost "one-piece" oak floor, is to use plenty of nails in both the subfloor and the top floor. See nail schedule, table 3, page 9.

EXAMINE SUBFLOOR CAREFULLY

36. Examine the subfloor carefully. Remove all dirt and plaster lumps, drive down any raised nails, replace broken boards, and make sure the floor is level and solid. Then sweep clean. Use no water.

BUILDING PAPER AND INSULATION

37. Lay a good quality building paper over the clean subfloor. Use building paper of a type known as "15-lb asphalt saturated roll felt." Do not use thin, black-sized or red rosin-sized paper, or "slaters" felt.

INSULATING OVER HEATING PLANT

38. For rooms directly over heating plants, use double-weight building paper (30-lb asphalt felt) or 30-lb asbestos paper, or standard insulating board about $\frac{1}{2}$ -inch thick. If preferred, the insulation can be applied (in new or old buildings) on the basement ceiling, set in between the floor joists.

SLEEPERS OR SCREEDS

39. If the under or subfloor is to be omitted, and the oak flooring is to be nailed directly to wood "sleepers" or "screeds" set in or on the concrete slab, the sleepers should be spaced not more than 12 inches center to center.

40. When a subfloor is to be installed over a concrete slab, the sleepers may then be spaced on 16- or 18-inch centers. Sleepers should be tightened in place. There are various approved devices, such as galvanized metal clips, expansion bolts in lead sleeves, and wire. Fastening and tightening by twisting strong wire around sleepers has proved a simple and effective method.

PRESERVED LUMBER FOR SLEEPERS

41. Sleepers should be of pretreated lumber, impregnated with an approved wood preservative. They should be of a lumber grade equivalent to No. 1 Common, 2- by 4-inch or 2- by 3-inch, and laid with the flat side down.

FLOOR FURRING

42. When electrical conduits and piping are to be laid on top of the wood subfloor, floor furring strips of the required thickness and $1\frac{3}{4}$ inches wide are spaced on 12-inch centers and tacked to the subfloor. They are laid at right angles to direction of the finished flooring. The latter is nailed through the furring strips, using nails one size larger than those specified in the nail schedule, table 3, page 9.

FLOOR VENTILATION VERY IMPORTANT

43. Where basements are not provided, adequate provision must be made for the free movement of cross currents of air beneath the building. This circulation may be obtained by providing vents and other openings in the foundation walls.

44. The total area of vent openings should be at least $1\frac{1}{2}$ percent of the first-floor area, and more, if possible.

45. Stagnated and humid air under a building will encourage fungus, mold, and dry rot. The preventive is air circulation. When conditions do not permit adequate ventilation, the oak flooring should never be less than standard $1\frac{3}{16}$ -inch thickness (actual $2\frac{5}{32}$ inch).

Architectural designs requiring "low-slung" floors may be modified slightly to permit the introduction of sufficient ventilating openings.

NAILS AND NAILING

46. Proper nails and correct nailing hold the flooring in place, make the floor rigid, and prevent squeaks. The nails should be started through the strip where the tongue leaves the shoulder, and driven inwardly at an angle of 45 to 50 degrees to the floor. (See fig. 4.)

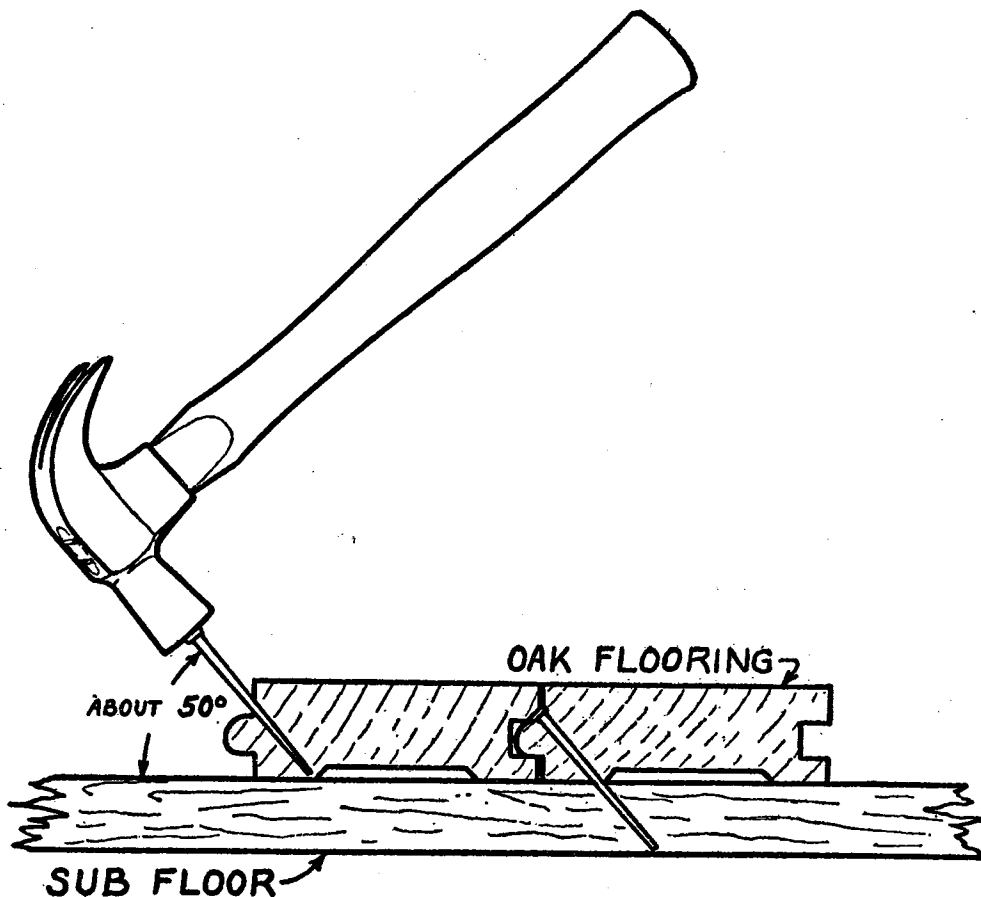


FIGURE 4.—Method of nailing

Countersink all nails with a steel set or use a nail for setting. Do not do this with a hatchet or hammer, as this may cause bruises and scars that cannot be removed by scraping and sanding.

TABLE 3.—Nail schedule

All tongued-and-grooved oak flooring must be blind nailed.
All oak flooring $\frac{1}{2}$ inch or less in thickness must be laid on a subfloor.
All square-edge flooring must be face nailed (through the top face) instead of blind nailed.

Flooring—nominal dimension (inches)	Nails	
	Size	Spacing
$1\frac{3}{16}$ by 2, $2\frac{1}{4}$, and $3\frac{1}{4}$	8-d light flooring nail—use wire or steel-cut casing nail (cut nail is preferable).	10 in. apart.
$1\frac{3}{16}$ by $1\frac{1}{2}$	Same as above	12 in. apart.
$\frac{1}{2}$ by $1\frac{1}{2}$, and 2.....	6-d bright wire casing nails.....	10 in. apart.
$\frac{3}{8}$ by $1\frac{1}{2}$ and 2.....	4-d bright wire casing nails.....	8 in. apart.
$\frac{5}{16}$ by $1\frac{1}{2}$ and 2.....	$1\frac{1}{4}$ -in. barbed-wire flooring brad, no. 16; heads countersunk and puttied.	2 nails every 7 in.

HOW TO LAY OAK FLOORING

47. The following instructions are intended for the laying of oak floors in new construction and over wood subfloors. However, they also apply generally to the laying of oak flooring over old floors.

WHERE TO BEGIN

48. Leave an expansion space of not less than $\frac{1}{2}$ inch on all sides next to the walls.

49. The flooring strips are started square with the room, against either side wall, and, preferably, are run lengthwise with the room. They are face-nailed along the edges next to the wall where the base-shoe will conceal the nailing. All other flooring strips are blind-nailed on the tongue edge.

DRIVING UP

50. After laying and nailing four strips of oak flooring, place a short piece of straight-edged hardwood against the tongue of the outside strip flooring, and drive it up snugly. This drives the flooring strips into their final position.

FLUSH FLOOR

51. Whenever possible, carry the laying through doorways continuously from one room into another, so that all rooms will have a flush floor. Avoid laying a ripped strip at doors or where it may mar appearances.

SHORT PIECES AND JOINTS

52. Use the shortest and trimmed pieces of flooring inside of closets and recesses.

53. All flooring strips are tongued and grooved on the sides and on the ends. The latter is "end-matching", and, after the floor is scraped or sanded, the end joints are all but invisible. The fit of all pieces is practically perfect when laid side to side and end to end. The end jointing, therefore, may come anywhere in the floor, without regard to a joist or a sleeper bearing at the joint; but joints should be placed so as to avoid having two or three ends in line or clustered together.

RANDOM LAYING

54. Oak flooring of the $\frac{15}{16}$ -inch thickness (actual $\frac{25}{32}$ inch), is made in widths $1\frac{1}{2}$ inches and $2\frac{1}{4}$ inches, and also $3\frac{1}{4}$ inches when ordered. Specify the width desired, or call for all three widths—about an equal quantity of each—to be laid at random. This makes a very interesting floor, with a mellowed effect, and is suited to all but the most formal styles of design.

LAYING NEW OAK FLOORS OVER OLD

55. The old floors serve as subfloors. Replace boards that can not be planed or nailed down level, drive down all loose nails, nail the boards securely, and make sure the old floor is level and free of humps. Remove the base shoe or moulding strip at the bottom of the base (baseboard). Sweep clean and lay saturated felt. Then proceed with the laying of the new floor. Lay the new oak flooring at right angles to the old floor.

SURFACING "SCRAPING, OR SANDING"

56. Oak flooring is delivered to the job with a wearing surface that is beautifully smooth and as near perfect as modern machinery can make it.

57. When ready for surfacing, the floor should be swept clean. Floors should be traversed several times, working on the first traverse across the grain and then lengthwise with the grain, starting with no. 2 sandpaper on the machine and graduating to no. 1/2 sandpaper on the second traverse, and with no. 0 or no. 00 sandpaper on the third and fourth traverses. For very fine floors, four or five traverses are essential. The floor should then receive a final buffing or cleaning with fine sandpaper (use fine sandpaper no. 1/2 that has been used on the machine sander) or no. 3 steel wool—by machine or by hand. Do not use steel wool, however, just before or after a paste filler is applied.

58. After sanding, sweep perfectly clean and permit no one to walk on the floor until the floor stain, filler, or first coat of finish has been applied and is dry.

FINISHING

59. The finish of oak floors is of vital importance in developing complete floor satisfaction. Modern floor finishes by many well-known producers are available. They offer color and service to complete the harmony of any color scheme desired. Reference may be made to well-qualified floor finishers or to the makers of the outstanding brands for complete information in keeping with individual tastes.

EFFECTIVE DATE

The standard is effective for new production beginning March 15, 1936.

STANDING COMMITTEE

The following comprises the membership of the standing committee, which is to review, prior to circulation for acceptance, proposed revisions to keep the standard abreast of progress in the industry. Each association nominated its own representatives. Suggestions concerning the standard may be directed to the Division of Trade Standards, National Bureau of Standards, Washington, D. C.

Oak Flooring Manufacturers:

B. A. MAYHEW, Fordyce Lumber Co., Fordyce, Ark.
W. J. WRIGHT, M. B. Farrin Lumber Co., Cincinnati, Ohio.
J. H. LANE, Long-Bell Lumber Co., Kansas City, Mo.

American Institute of Architects:

THEODORE I. COE, 4000 Cathedral Avenue, Washington, D. C.

National Association of Building Owners and Managers:

Invited to name representative.

National Retail Lumber Dealers Association:

HISTORY OF PROJECT

Grading rules for the selection of oak flooring have been in effect for a period of 27 years, during which time there has been almost constant progress toward their standardization.

The National Oak Flooring Manufacturers' Association, which in 1935 represented approximately 70 percent of the production volume of oak flooring, submitted its grading specifications to the National Bureau of Standards on December 12, 1935, with a request that they be submitted to all interested manufacturers, distributors, and users of oak flooring for their acceptance as the commercial standard for oak flooring. This course was followed and the proposed commercial standard for oak flooring was circulated December 14, 1935.

Approval of the standard was indicated by manufacturers representing a satisfactory majority of the production volume of oak flooring and by many wholesale and retail distributors, architects, and other user interests.

The success of the project was announced February 14, 1936, and the standard became effective March 15, 1936.

ACCEPTANCE OF COMMERCIAL STANDARD

This sheet properly filled in, signed, and returned will provide for the recording of your organization as an acceptor of this commercial standard.

Date _____

Division of Trade Standards,
National Bureau of Standards,
Washington, D. C.

Gentlemen:

Having considered the statements on the reverse side of this sheet, we accept the Commercial Standard CS56-36 as our standard of practice in the

Production ¹

Distribution ¹

Use ¹

of oak flooring.

We will assist in securing its general recognition and use, and will cooperate with the standing committee to effect revisions of the standard when necessary.

Signature _____

(Kindly typewrite or print the following lines)

Title _____

Company _____

Street address _____

City and State _____

¹ Please designate which group you represent by drawing lines through the other two. In the case of related interests, trade papers, colleges, etc., desiring to record their general approval, the words "in principle" should be added after the signature.

TO THE ACCEPTOR

The following statements answer the usual questions arising in connection with the acceptance and its significance:

1. *Enforcement.*—Commercial standards are commodity specifications voluntarily established by mutual consent of the industry. They present a common basis of understanding between the producer, distributor, and consumer and should not be confused with any plan of governmental regulation or control. The United States Department of Commerce has no regulatory power in the enforcement of their provisions, but, since they represent the will of the industry as a whole, their provisions through usage soon become established as trade customs and are made effective through incorporation into sales contracts by means of labels, invoices, and the like.

2. *The acceptor's responsibility.*—The purpose of commercial standards is to establish for specific commodities nationally recognized grades or consumer criteria, and the benefits therefrom will be measurable in direct proportion to their general recognition and actual use. Instances will occur when it may be necessary to deviate from the standard, and the signing of an acceptance does not preclude such departures; however, such signature indicates an intention to follow the commercial standard where practicable in the production, distribution, or consumption of the article in question.

3. *The Department's responsibility.*—The major function performed by the Department of Commerce in the voluntary establishment of commercial standards on a Nation-wide basis is fourfold: First, to act as an unbiased coordinator to bring all branches of the industry together for the mutually satisfactory adjustment of trade standards; second, to supply such assistance and advice as past experience with similar programs may suggest; third, to canvass and record the extent of acceptance and adherence to the standard on the part of producers, distributors, and users; and fourth, after acceptance, to publish and promulgate the standard for the information and guidance of buyers and sellers of the commodity.

4. *Announcement and promulgation.*—When the standard has been endorsed by companies representing a satisfactory majority of production, the success of the project is announced. If, however, in the opinion of the standing committee of the industry or the Department of Commerce, the support of any standard is inadequate, the right is reserved to withhold promulgation and publication.

ACCEPTORS

Individuals and organizations listed below have indicated, in writing, acceptance of this specification as their standard of practice in production, distribution, or use, but such endorsement does not signify that they may not find it necessary to deviate from the standard, nor does it signify that the producers so listed guarantee all of their products to conform with the requirements of this standard.

ASSOCIATIONS

American Association of State Highway Officials, Washington, D. C. (In principle.)
 American Home Economics Association, Washington, D. C.
 American Institute of Architects, The, Washington, D. C. (In principle.)
 Associated General Contractors of America, Seattle Chapter, Inc., Seattle, Wash. (In principle.)
 Kentucky Retail Lumber Dealers Association, Louisville, Ky. (In principle.)
 Michigan Retail Lumber Dealers Association, Lansing, Mich.
 Mountain States Lumber Dealers Association, Denver, Colo. (In principle.)
 National Hardwood Lumber Association, Chicago, Ill. (In principle.)
 National Lumber Exporters Association, Memphis, Tenn.
 National Lumber Manufacturers Association, Washington, D. C. (In principle.)
 National Oak Flooring Manufacturers Association, Memphis, Tenn.
 Nebraska Lumber Merchants Association, Lincoln, Nebr.
 Ohio Association of Retail Lumber Dealers, The, Xenia, Ohio.
 United Roofing Contractors Association, Chicago, Ill. (In principle.)
 West Coast Lumbermen's Association, Seattle, Wash. (In principle.)

FIRMS

A One Building Material Co., Inc., Evansville, Ind.
 Acme Steel Co., Seattle, Wash. (In principle.)
 Adams, Franklin O., Tampa, Fla.
 Addison Rudesal Co., Atlanta, Ga.
 Altfillisch, Chas., Decorah, Iowa.
 Andrews, Jones, Biscoe & Whitmore, Boston, Mass.

Angelina County Lumber Co., Keltys, Tex.
 Antioch Lumber & Coal Co., Antioch, Ill.
 Arkansas Oak Flooring Co., Pine Bluff, Ark.
 Arrington & Co., Inc., W. C., Norfolk, Va.
 Atlanta Oak Flooring Co., Atlanta, Ga.
 Augusta Lumber Co., Augusta, Ga.
 Bailey Lumber Co., Bluefield, W. Va.
 Baldrige Lumber Co., J. C., Albuquerque, N. Mex.
 Baldwin Lumber Co., Billings, Mont.
 Baltic Lumber Co., The, Baltic, Ohio.
 Barnes Lumber Co., W. F. & J. F., Waco, Tex.
 Barr Lumber Co., Santa Ana, Calif.
 Bartlett & Co., Inc., Binghamton, N. Y.
 Bass, Obadiah, Lexington, Ky.
 Bastow, Abram, New York, N. Y. (In principle.)
 Bauhan, Rolf W., Princeton, N. J.
 Bayne Lumber Co., L. M., Ottawa, Ill.
 Beacham & LeGrand, Greenville, S. C.
 Beaman Lumber Co., Marion, N. C.
 Beeson, Carroll O., Crawfordsville, Ind.
 Bennett Lumber Co., Kansas City, Mo.
 Berger & R. L. Kelley, F. E., Champaign, Ill.
 Beuttler & Arnold, Sioux City, Iowa.
 Bickford, Robert T., Elmira, N. Y.
 Bishop, Horatio W., Los Angeles, Calif.
 Blackburn, Robert, Milwaukee, Wis.
 Blacker & Shepard Co., Boston, Mass.
 Blackstock Lumber Co., Seattle, Wash.
 Blithe, Wesley Leshner, Philadelphia, Pa.
 Boehm, George A., New York, N. Y.
 Bond-Woolf & Co., Alcoa, Tenn.
 Botsford Lumber Co., Winona, Minn.
 Bourbon Lumber Co., Inc., Paris, Ky.
 Boydton Manufacturing Co., Boydton, Va.
 Brading-Rhea Lumber Co., Johnson City, Tenn.

- Bradley Lumber Co. of Arkansas, Warren, Ark.
 Brainerd, Harry B., New York, N. Y.
 Braseth & Houkom, Fargo, N. Dak.
 Brattin & Son, F. J., Shepherd, Mich.
 Brazier, Clarence W., Chester, Pa.
 Briggs Co., L. W., Worcester, Mass.
 Briggs Lumber & Manufacturing Co., Chas. A., Scottdale, Pa.
 Brown & Sons Lumber Co., Inc., W. P., Louisville, Ky. (In principle.)
 Bruce Co., E. L., Memphis, Tenn.
 Bruce Lumber Co., Riverton, Ill.
 Brust, Peter, Milwaukee, Wis.
 Buechner & Orth, St. Paul, Minn.
 Builders Supply Co., Inc., Tullahoma, Tenn.
 Burnham Bros. & Hammond, Chicago, Ill. (In principle.)
 California Shingle Co., Santa Cruz, Calif.
 Campbell Co., New Wilmington, Pa.
 Campbell Lumber and Manufacturing Co., The, Toledo, Ohio.
 Cannon & Fetzer, Salt Lake City, Utah.
 Carder, Macon O., Amarillo, Tex.
 Carhart Lumber Co., Wayne, Nebr.
 Carlander, Guy A., Amarillo, Tex.
 Carrier Lumber Co., Sardis, Miss.
 Carroll, John J., Atlantic City, N. J.
 Carter Lumber Co., A. L., Beaumont, Tex.
 Cayton, Herbert C., Honolulu, Hawaii. (In principle.)
 Center Lumber Co., Pittsburgh, Pa.
 Central City Lumber and Manufacturing Co., Central City, Ky.
 Central Lumber Co., Charlotte, N. C.
 Central Warehouse Lumber Co., Minneapolis, Minn.
 Century Lumber Co., Des Moines, Iowa.
 Certain Lumber Co., W. N., Neodesha, Kans.
 Cervin & Stuhr, Rock Island, Ill.
 Chapin Lumber Co., The, Aurora, Colo.
 Chapin, Rollin C., Minneapolis, Minn.
 Chapman & Dewey Lumber Co., Memphis, Tenn.
 Chickamauga Cedar Co., Stevenson, Ala.
 Child, Harry C., Sayre, Pa.
 Clark, Carl W., Cortland, N. Y.
 Clark County Lumber Co., The, Springfield, Ohio.
 Coit, Elisabeth, New York, N. Y. (In principle.)
 Collins & Son, T. J., Staunton, Va.
 Colonial Hardwood Flooring Co., Hagerstown, Md.
 Columbia Lumber Co., Seattle, Wash.
 Conover Lumber Co., Keyport, N. J.
 Conrad & Cummings, Binghamton, N. Y. (In principle.)
 Conrow, H. S., Wichita, Kans.
 Cook Co., A. B., Malvern, Ark.
 Cope, Thomas Pym, Philadelphia, Pa.
 Cottonwood Lumber Co., Cottonwood, Ariz.
 Courville, Deo, Frankfort, Mich.
 Cowan Lumber Co., Inc., Mobile, Ala.
 Creith-Potter Lumber Co., The, Columbus, Ohio.
 Cresson Lumber Co., Cresson, Pa.
 Crossett Lumber Co., Crossett, Ark.
 Crumb-Colton Co., Rockford, Ill.
 Cuthbert & Cuthbert, Ann Arbor, Mich.
 Daniel, Jr., J. E., Dewitt, Ark.
 Davenport, Peters Co., Boston, Mass.
 Davis Lumber Co., Schenectady, N. Y.
 Dearstine Lumber Co., J. C., Schenectady, N. Y.
 DeJarnette, Charles Wagner, Des Moines, Iowa. (In principle.)
 Derr-Gibbons Supply Co., Philadelphia, Pa.
 De Soto Hardwood Flooring Co., Memphis, Tenn.
 Detroit Edison Co., The, Detroit, Mich.
 Dickerson Lumber Co., Huntington, W. Va.
 Dickey, C. W., Honolulu, Hawaii.
 Dierks Lumber and Coal Co., Kansas City, Mo.
 Doak Lumber Co., Greeneville, Tenn.
 Dodds Lumber Co., Omaha, Nebr.
 Dodge & Morrison, New York, N. Y.
 Doneghy & Spink Co., Kansas City, Mo.
 Donovan, John J., Berkeley, Calif.
 Dorris Lumber Co., Harrisburg, Ill. (In principle.)
 Dougherty Lumber Co., The, Cleveland, Ohio.
 Dover Lumber Co., Dover, N. J.
 Dower Lumber Co., John, Tacoma, Wash.
 East Coast Lumber and Supply Co., Fort Pierce, Fla.
 Easterly Lumber Co., Chas., Carbon-dale, Ill.
 Eastman, Gardiner & Co., Laurel, Miss.
 Eastwood Lumber Co., Albert S., Providence, R. I.
 Edwards & Sayward, Atlanta, Ga.
 Elgin Lumber Co., Elgin, Ill.
 Elliott, Hayden & Co., La Salle, Ill.
 Emery, Henry G., Nyack, N. Y.
 Emery's Sons, Inc., Thos., Cincinnati, Ohio.
 Enterprise Lumber Co., Little Rock, Ark.
 Epple & Kahrs, Newark, N. J.
 Evans & Callaway, Fowler, Ind.
 Exchange Lumber Co., Roanoke, Va.
 Exchange Lumber and Manufacturing Co., Spokane, Wash.
 Farmers Lumber Co., La Grange, Tex.
 Farrin Lumber Co., The M. B., Cincinnati, Ohio.
 Farris Hardwood Lumber Co., Nashville, Tenn.

- Fitzpatrick Lumber Co., J. J., Madison, Wis.
 Flannagan, Eric G., Henderson, N. C.
 Flint & Broad, Dallas, Tex.
 Florida, University of, Control Institutions of Higher Learning, Gainesville, Fla. (In principle.)
 Ford Lumber Co., J. B., Harrisburg, Ill.
 Fordyce Lumber Co., Fordyce, Ark.
 Forsblom, Ed., Wichita, Kans.
 Friedman, Harry B., Fort Worth, Tex.
 Gall, Harry L. C., New York, N. Y.
 Garber Lumber and Construction Co., The, Strasburg, Ohio.
 Geddes, Joseph W., Williamsburg, Va.
 Gibb, A. N., Ithaca, N. Y. (In principle.)
 Gibbs Lumber Co., Inc., Anaheim, Calif.
 Gittings-Stockham Lumber Co., Denver, Colo.
 Glore Lumber Co., C. A., Centralia, Ill.
 Glover, W. E., Topeka, Kans.
 Goedde & Co., B., East St. Louis, Ill.
 Goodfellow Lumber Co., St. Louis, Mo.
 Gordon & Kaelber & Chas. Wm. Eldridge, Oswego, N. Y.
 Gorrie Lumber Co., Montgomery, Ala.
 Great Northern Lumber Co., Wenatchee, Wash.
 Green Bay Lumber Co., Maquoketa, Iowa.
 Griffin Lumber Co., Inc., Bessemer, Ala.
 Griffith Stave Co., Geo. C., St. Louis, Mo.
 Guernsey-Westbrook Co., The, Hartford, Conn.
 Gunter Lumber Co., Kansas City, Mo.
 Hager & Cove Lumber Co., Lansing, Mich.
 Hallack & Howard Lumber Co., The, Denver, Colo.
 Hamilton, John A., New York, N. Y.
 Hamilton Lumber Co., The, Hamilton, Ohio.
 Hammond Lumber Co., Los Angeles, Calif.
 Harper & West, Boston, Mass.
 Harris Flooring Co., Long Island City, N. Y.
 Harris Lumber Co., Loveland, Colo.
 Harris Manufacturing Co., Johnson City, N. Y.
 Hartwick-Wescott Lumber Co., Ypsilanti, Mich.
 Hartwick-Woodfield, Jackson, Mich.
 Hasbrouck Co., Inc., John, New York, N. Y.
 Hawkeye Lumber Co., Oskaloosa, Iowa.
 Haxby & Bissell, Minneapolis, Minn.
 Hays & Son, W. A., Blackwell, Okla.
 Hayward Lumber Co., Homer T., Salinas, Calif.
 Heffelfinger Corporation, Louis, Hampton, Va.
 Helfensteller Hirsch & Watson, St. Louis, Mo. (In principle.)
 Hendryx, Thos. K., Bradford, Pa.
 Henne Lumber Co., New Braunfels, Tex.
 Herald Publishing Co., Inc., Mount Vernon, Wash. (In principle.)
 Herbst & Kuenzli, Milwaukee, Wis.
 Hickson-Rogers Manufacturing Co., Paragould, Ark.
 Higgins, Charles H., New York, N. Y.
 Hilgers, Geo. B., Sioux City, Iowa.
 Hodgdon & Son, Charles, Chicago, Ill.
 Hoener Baum & Froese, St. Louis, Mo.
 Hoffman & Baldwin, West Chester, Pa.
 Holcomb Bros., Sycamore, Ill.
 Holsman & Holsman, Chicago, Ill.
 Holt Hardwood Co., Oconto, Wis.
 Home Lumber & Coal Co., Dixon, Ill.
 Houston Better Business Bureau, Houston, Tex. (In principle.)
 Hulse Co., W. E., Hutchinson, Kans.
 Humboldt Hardwood Co., Eureka, Calif. (In principle.)
 Hunt & H. C. Chambers, Myron, Los Angeles, Calif.
 Hunter, Jr., J. H., Beaumont, Tex.
 Hunter Lumber Co., Chillicothe, Ill.
 Hunting Lumber Co., R. D., Cedar Rapids, Iowa.
 Hutton & Bourbonnais Co., Hickory, N. C.
 Illinois, University of, Urbana, Ill. (In principle.)
 Independent Lumber Co., The, Grand Junction, Colo.
 Inlaid Floor Co., San Francisco, Calif.
 Interstate Lumber Co., The, Belpre, Ohio.
 Interstate Lumber Co., Missoula, Mont.
 Iowa Builders Supply Co., Cedar Rapids, Iowa.
 Iver, Inc., Edwin J., Seattle, Wash.
 Jacoby & Everett, Allentown, Pa.
 Joannes, Francis Y., New York, N. Y.
 Johnson, Keplar B., Seattle, Wash.
 Johnstone & Eggert, North Tonawanda, N. Y.
 Joseph Lumber Co., Chicago, Ill.
 Karcher, Walter T., & Livingston Smith, Philadelphia, Pa.
 Keich & O'Brien, Warren, Ohio.
 Kelley-Maverick Co., San Antonio, Tex.
 Kenova Hardwood Flooring Co., Kenova, W. Va.
 Kentucky Flooring Co., Orange, Va.
 Klueppelberg, A. E., New York, N. Y. (In principle.)
 Knepp, H. E., Lewistown, Pa.
 Knighton & Howell, Portland, Oreg. (In principle.)
 Knowles, B. J., Winona, Minn.

- Krause & Managan, Inc., Lake Charles, La.
 Krotter Co., F. C., Palisade, Nebr.
 Kyle, Herbert S., Charleston, W. Va.
 Lake Washington Shipyards, Houghton, Wash.
 Lambert Lumber Co., Leavenworth, Kans.
 Lampland Lumber Co., St. Paul, Minn.
 Lander Lumber Co., El Paso, Tex.
 Lanham Hardwood Flooring Co., Louisville, Ky.
 Las Vegas Lumber Co., Las Vegas, N. Mex.
 Law, Law & Potter, Madison, Wis.
 Lawrence, Holford & Allyn, Portland, Oreg.
 Leachman Lumber Co., Des Moines, Iowa.
 Liggett Drug Co., Inc. (construction department), New York, N. Y. (In principle.)
 Lightsey Bros., Miley, S. C.
 Littlefield Lumber Co., Portsmouth, N. H.
 Loeb, Laurence M., White Plains, N. Y.
 Long-Bell Lumber Co., The, Kansas City, Mo.
 Louisiana Central Oak Flooring Corporation, Monroe, La.
 Lumber Exchange of Baltimore City, The, Baltimore, Md. (In principle.)
 Lumber and Millwork Co. of Philadelphia, The, Philadelphia, Pa.
 Lyman-Hawkins Lumber Co., The, Akron, Ohio.
 Magney & Tusler, Inc., Minneapolis, Minn.
 Maisler Bros. Lumber Co., Fresno, Calif. (In principle.)
 Mann & Co., Hutchinson, Kans.
 Manufacturers Reserve Supply, Inc., Irvington, N. J.
 Marsh Lumber Co., The, Dover, Ohio.
 Martin & Son, A. Oscar, Doylestown, Pa.
 Mason & Co., George D., Detroit, Mich. (In principle.)
 Mason Lumber Co., Jacksonville, Fla.
 Mason Sons, Inc., A., Peru, N. Y.
 Massachusetts, Commonwealth of, Division of Standards, Boston, Mass. (In principle.)
 Matthews Hardwood Lumber Co., J. J., Seattle, Wash.
 Mauk Lumber Co., The C. A., Toledo, Ohio.
 Mauran, Russell & Crowell, St. Louis, Mo.
 McClure & Struckman Co., Elgin, Ill.
 McCornack, Walter R., Cleveland, Ohio.
 McFarland Lumber Co. of Philadelphia, Pa.
 McGoldrick Lumber Co., Spokane, Wash.
 McMann Lumber Yard, J. J., Wake-man, Ohio.
 McMinnville Manufacturing Co., McMinnville, Tenn.
 Meadow River Lumber Co., The, Rainelle, W. Va.
 Melville Lumber Co., J. H., Monte Vista, Colo.
 Memphis Hardwood Flooring Co., Memphis, Tenn.
 Merit Oak Flooring Co., Birmingham, Ala.
 Meyers & Johnson, Erie, Pa.
 Midwest Lumber Co., Dubuque, Iowa.
 Miles Lumber and Coal Co., A. W., Livingston, Mont.
 Millard, Julian, Harrisburg, Pa.
 Miller Bros. Co., Johnson City, Tenn.
 Miller & Yeager, Terre Haute, Ind.
 Milligan Co., D., Jefferson, Iowa.
 Missouri Floor Co., St. Louis, Mo.
 Montgomery Oak Flooring Co., Montgomery, Ala.
 Montgomery & Patteson, Charleston, W. Va.
 Moore & Co., Le Mars, Iowa.
 Moore Lumber Co., L. A., Mason City, Iowa.
 Moore & Williams, Miami, Fla.
 Mooser, William, San Francisco, Calif.
 Morgan, D. H., Philadelphia, Pa.
 Morrison, Gay, Malvern, Ark.
 Morrison-Merrill & Co., Salt Lake City, Utah.
 Moses Dillon Co., Sterling, Ill.
 Moss Tie Co., T. J., Oak Flooring Division, Springfield, Mo.
 Mountain Lumber Co., Inc., Lothair, Ky.
 Mowry & Co., Inc., Geo., Derry, Pa.
 Mueller, Fred G., Hamilton, Ohio.
 Muhlenberg Bros., Reading, Pa.
 Mundie & Jensen, Chicago, Ill.
 Mutual Lumber Co., New Castle, Pa.
 Myers, Nathan, Newark, N. J.
 Nassau Suffolk Lumber and Supply Corporation, Amityville, N. Y.
 Natwick & Co., Inc., J., Baltimore, Md.
 Nelson, W. F., Dallas, Tex.
 Nettleton Lumber Co., Seattle, Wash.
 New Rochelle Coal and Lumber Co., New Rochelle, N. Y.
 Newbegin Lumber Co., James G., Tacoma, Wash.
 Newburgh Lumber Co., The, Newburgh, N. Y.
 Nickey Bros., Inc., Memphis, Tenn.
 North Branch Flooring Co., Chicago, Ill.
 North Hudson Manufacturing Co., North Bergen, N. J.
 Norton & Son, F. S., Algona, Iowa.
 O & N Lumber Co., Menomonie, Wis.
 Oakley & Son, Elizabeth, N. J.
 Officer, Gwynn, Berkeley, Calif.

- Oklahoma, University of, Norman, Okla.
 O'Rourke Co., John, West Orange, N. J.
 Overstreet & Town, N. W., Jackson, Miss.
 Ozark Oak Flooring Co., Bismarck, Mo.
 Pancoast, Russell T., Miami Beach, Fla.
 Parker, Llewellyn A., Los Angeles, Calif.
 Parmelee, M. E., Knoxville, Tenn. (In principle.)
 Paterson-McInnis Lumber Co., Gulf Hammock, Fla.
 Patton Timber Co., Ashland, Ky.
 Pearson Hardwood Flooring Co., Oneida, Tenn.
 Pehrson, G. A., Spokane, Wash.
 Pennsylvania, Department of Property and Supplies, Harrisburg, Pa.
 Peoples Planing Mill, Punxsutawney, Pa.
 Peoria, Better Business Bureau, Peoria, Ill. (In principle.)
 Perfection Oak Flooring Co., Inc., Shreveport, La.
 Pierson & Wilson, Washington, D. C.
 Piper, F. Stanley, Bellingham, Wash.
 Plachek, James W., Berkeley, Calif.
 Porter Lumber Co., The, Springfield, Ill.
 Potter Bros., Morrison, Ill.
 Potter Lumber and Supply Co., The, Worthington, Ohio.
 Prairie du Rocher Lumber Co., Prairie du Rocher, Ill.
 Putnam & Jones, Carthage, Mo.
 Ramsey & Sleeper, New York, N. Y.
 Rayburn, Donald J., El Dorado, Kans. (In principle.)
 Reid, William H. Jr., Billings, Mont.
 Renuart Lumber Yards, Inc., Coral Gables, Fla.
 Reserve Lumber Co., The, Cleveland, Ohio.
 Restrict Lumber Co., Detroit, Mich.
 Rice & Lockwood Lumber Co., Springfield, Mass.
 Richmond Lumber Co., Richmond, Ind.
 Rindge & Rindge, Grand Rapids, Mich.
 Ripley, David, & Sons-W. Frank Hopping, Inc., Port Newark, N. J.
 Risser Lumber Co., Art., Paris, Ill.
 Robbins Flooring Co., Rhinelander, Wis.
 Rockford Lumber and Fuel Co., Rockford, Ill.
 Rockwell Bros. & Co., Houston, Tex.
 Rogvoy & Wright, Detroit, Mich.
 Root Lumber Co., Inc., Crown Point, Ind.
 Rounds & Porter Co., Wichita, Kans.
 Rowley, Charles Bacon, & Associates, Inc., Cleveland, Ohio.
 Runels Construction Co., R. E., Lowell, Mass.
 Russ & Harrison, Indianapolis, Ind.
 Russell, Lance & Muri, Tacoma, Wash.
 Saginaw Lumber Co., The, Saginaw, Mich.
 Saloy, William, Jamaica, N. Y.
 Sarvis, Lewis J., Battle Creek, Mich.
 Scamell, Ralph E., Topeka, Kans.
 Schneider, Wm. A., Milwaukee, Wis.
 Schoeppe, Edward, Philadelphia, Pa.
 Scruggs-Guhleman Lumber Co., Jefferson City, Mo.
 Searle & Chapin Lumber Co., Lincoln, Nebr.
 Sells Lumber & Manufacturing Co., Johnson City, Tenn.
 Seyler Lumber Co., Bluefield, W. Va.
 Shaw, R. W., Enid, Okla.
 Sherrill-Russell Lumber Co., Paducah, Ky.
 Short & Walls Lumber Co., Middletown, Del.
 Sitterding-Carneal-Davis Co., Inc., Richmond, Va.
 Smith & Edwards, Washington, D. C.
 Smith & English, Hutchinson, Kans.
 Smith, Hinchman & Grylls, Inc., Detroit, Mich.
 Smith & Sons, J. E., Philadelphia, Pa.
 Solie Lumber Co., Janesville, Wis.
 South Side Lumber and Supply Co., The, Toledo, Ohio.
 South Texas Lumber Co., Houston, Tex.
 Southern California, University of, College of Architecture and Fine Arts, Los Angeles, Calif. (In principle.)
 Southern Industrial Builder, Jackson, Miss. (In principle.)
 Southern Pine Lumber Co., Texarkana, Ark.
 Sowers-Benbow Lumber Co., The, Columbus, Ohio.
 Spahn & Rose Lumber Co., Dubuque, Iowa.
 Spaulding Logging Co., Chas. K., Portland, Oreg. (In principle.)
 Standard Lumber Co., The, Ironton, Ohio.
 Standard Lumber & Supply Co., Fort Wayne, Ind.
 Star Lumber Co., The, Liberal, Kans.
 Stewart Lumber Co., A. P., Thermopolis, Wyo.
 Stockton Lumber Co., Inc., Stockton, Calif.
 Stoetzel, Ralph E., Chicago, Ill.
 Stopper, Eugene A., Philadelphia, Pa.
 Stowers Lumber & Manufacturing Co., Harriman, Tenn.
 Strong & Hale Lumber Co., The, Portland, Conn.

- Sullivan Lumber Co., Tecumseh, Nebr.
 Sundt, Wenner & Fink, Philadelphia, Pa.
 Swan Lake Moulding Co., Klamath Falls, Oreg.
 Sweet's Catalog Service, New York, N. Y. (In principle.)
 Tacoma Better Business Bureau, Tacoma, Wash. (In principle.)
 Tallman, Carl C., Ithaca, N. Y.
 Tar River Lumber Co., Rocky Mount, N. C.
 Taylor, Ellery K., Philadelphia, Pa.
 Taylor Lumber Co., Houston, Tex.
 Temple Lumber Co., Houston, Tex.
 Temple Lumber Co., Pineland, Tex.
 Texas Oak Flooring Co., Dallas, Tex.
 Texas Technological College, Lubbock, Tex. (In principle.)
 Textor Lumber Co., Wilkinsburg, Pa.
 Thomas, Glen H., Wichita, Kans.
 Thompson Lumber Co., Minneapolis, Minn.
 Tilden Register & Pepper, Philadelphia, Pa.
 Todd, Conway L., Rochester, N. Y. (In principle.)
 Tolles & Co., J. H., Nashua, N. H.
 Tomlinson, Webster, Joliet, Ill.
 Topeka, City Building Department, Topeka, Kans.
 Tremont Lumber Co., Rochelle, La.
 Troast, N. Lester, & Associates, Juneau, Alaska.
 Updike-Kennedy Co., Inc., Trenton, N. J.
 Van Os, Seymour, Shreveport, La.
 Van Winkle Bromley Lumber Co., The, Paterson, N. J.
 Varner Lumber Co., Dallas, Tex.
 Verhey Lumber Co., Grand Rapids, Mich.
 Vickere Lumber Co., T. W., Sheridan, Wyo.
 Virginia Oak Flooring Co., Pulaski, Va.
 Virginia Polytechnic Institute, Blacksburg, Va.
 Voigt, S. S., Wichita, Kans.
 Volz & Hans C. Volz, Charles, Brooklyn, N. Y.
 Von Tobel Lumber Co., Ed., Las Vegas, Nev.
 Wachter & Horace W. Wachter, Harry W., Toledo, Ohio. (In principle.)
 Wallace & Herring, Alexandria, Va.
 Waples-Painter Co., Gainesville, Tex.
 Washington, State College of, Pullman, Wash. (In principle.)
 Waterville Lumber & Coal Co., Waterville, Kans.
 Weinberg, Joseph L., Cleveland, Ohio.
 Welsh, Carroll E., Huntington, N. Y.
 West Frankfort Lumber Co., West Frankfort, Ill.
 West Side Lumber Co., Atlantic City, N. J.
 Westerman Lumber Co., H. E., Montgomery, Minn.
 Western Red Cedar Lumber, Seattle, Wash. (In principle.)
 Westwood Lumber and Manufacturing Co., Weston, W. Va.
 White, Gordon D., Denver, Colo.
 White, Hugh E., Gastonia, N. C. (In principle.)
 White, Robert Leon, Austin, Tex. (In principle.)
 Whittier Lumber Co., Whittier, Calif.
 Wichita, City of, Wichita, Kans. (In principle.)
 Wilbur Lumber Co., West Allis, Wis.
 Willatsen, Andrew, Seattle, Wash.
 Willson, Fred F., Bozeman, Mont.
 Wisconsin's Transfer Yard, Oshkosh, Wis.
 Woltersdorf, Arthur, Chicago, Ill. (In principle.)
 Wood Lumber Co., Birmingham, Ala.
 Wood-Mosaic Co., Louisville, Ky.
 Wood & Son, E. J., Clarksburg, W. Va.
 Woodbridge Lumber Co., Woodbridge, N. J.
 Wooldbridge Co., J. C., Gainesville, Tex.
 Yawkey-Bissell Lumber Co., White Lake, Wis.
 Zantzinger & Borie, Philadelphia, Pa.
 Zimmermann Lumber, Inc., Buffalo, N. Y.

U. S. GOVERNMENT

- District of Columbia, Government of the, Washington, D. C. (In principle.)
 Treasury Department, U. S., Washington, D. C.
 Veterans' Administration, Washington, D. C.
 War Department, Washington, D. C.

COMMERCIAL STANDARDS

Item

CS no.

- 0-30. The commercial standards service and its value to business.
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- 2-30. Mopsticks.
- 3-28. Stoddard solvent.
- 4-29. Staple porcelain (all-clay) plumbing fixtures.
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- 6-31. Wrought-iron pipe nipples (second edition).
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- 48-34. Domestic burners for Pennsylvania anthracite (underfeed type).
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- 50-34. Binders board for bookbinding and other purposes.
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- 52-35. Mohair pile fabrics (100-percent mohair plain velvet, 100-percent mohair plain frieze, and 50-percent mohair plain frieze).
- 53-35. Colors and finishes for cast stone.
- 54-35. Mattresses for hospitals.
- 55-35. Mattresses for institutions.
- 56-36. Oak flooring.
- 57-36. Book cloths, buckrams and impregnated fabrics for bookbinding purposes except library bindings.
- 58-36. Woven elastic fabrics for use in overalls (overall elastic webbing).
- 59-36. Woven dress fabrics—testing and reporting.

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